CLAIMS

1. A method of producing salt of dinitramidic acid, comprising nitration of an initial compound with a nitrating acid mixture to form dinitramidic acid in a reaction mixture, characterised by adding to the reaction mixture a positive ion which with the dinitramide ion forms an ion pair complex that precipitates in the acidic reaction mixture, and separating the precipitate from the mixture.

2. A method as claimed in claim 1, characterised in that the positive ion originates from a basic nitrogen compound as a ring compound or chain compound with one or more nitrogens and one or more carbons.

3. A method as claimed in claim 1, characterised in that the positive ion is protonated guanylurea.

4. A method as claimed in claim 1, characterised in that the positive ion is added by the reaction mixture being mixed with an aqueous solution of a guanylurea salt.

5. A method as claimed in claim 1, characterised in that the positive ion is added by guanylurea being reacted with the reaction mixture to form protonated guanylurea in situ.

6. A method as claimed in claim 1, characterised in that the positive ion is added by the reaction mixture being mixed with an aqueous solution of guanylurea.

7. A method as claimed in claim 1, characterised in that the positive ion is added by cyanoguanidine being reacted with the reaction mixture to form protonated guanylurea in situ.

8. A method as claimed in claim 1, characterised in that the positive ion is added by reaction mixture being mixed with an aqueous solution or aqueous slurry of cyanoguanidine.

9. A method as claimed in claim 1, characterised in that the separated precipitate is used as starting material for preparation of other dinitramide salts.

10. A method as claimed in claim 1, characterised in that the separated precipitate is guanylurea dinitramide, that the precipitate is dissolved in a basic solution, and that a dinitramide salt with a cation from the used base is then precipitated.

11. A method as claimed in claim 10, characterised in that the solution is an alcohol solution.

12. A method as claimed in claim 10, characterised in that the base is KOH.

13. A method as claimed in claim 1, characterised in that the spent acid that remains after separating the precipitate from the reaction mixture is reprocessed for recovery of acid.